

10/163742

=>

Uploading 10049795.str

L1 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 16:51:26 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1168 TO ITERATE

85.6% PROCESSED 1000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

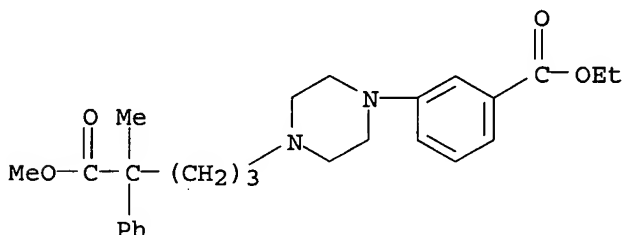
4 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 21310 TO 25410
PROJECTED ANSWERS: 4 TO 222

L2 4 SEA SSS SAM L1

=> d l2 1-4

L2 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 327030-29-5 REGISTRY
CN 1-Piperazinepentanoic acid, 4-[3-(ethoxycarbonyl)phenyl]-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H34 N2 O4
SR CA
LC STN Files: CA, CAPLUS

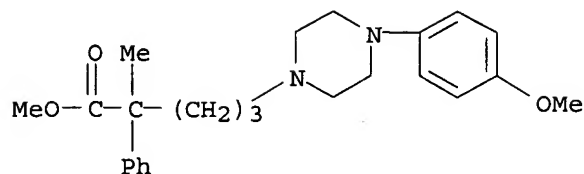


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 327030-21-7 REGISTRY
CN 1-Piperazinepentanoic acid, 4-(4-methoxyphenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H32 N2 O3
SR CA
LC STN Files: CA, CAPLUS

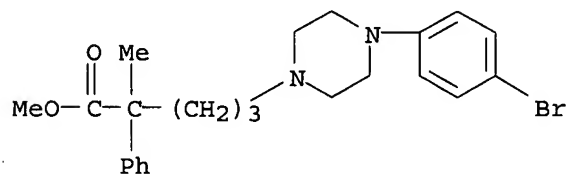
10/163742



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

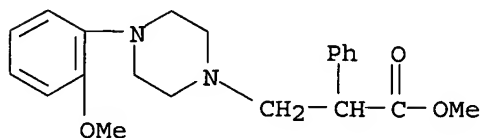
L2 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 327030-13-7 REGISTRY
CN 1-Piperazinepentanoic acid, 4-(4-bromophenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C23 H29 Br N2 O2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 132708-57-7 REGISTRY
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C21 H26 N2 O3
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10/163742

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s l1 sss full
FULL SEARCH INITIATED 16:58:09 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 23296 TO ITERATE

100.0% PROCESSED 23296 ITERATIONS 62 ANSWERS
SEARCH TIME: 00.00.01

L3 62 SEA SSS FUL L1

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	159.27	159.48

FILE 'CAPLUS' ENTERED AT 16:58:17 ON 29 SEP 2003
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FILE COVERS 1907 - 29 Sep 2003 VOL 139 ISS 14
FILE LAST UPDATED: 28 Sep 2003 (20030928/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

10/049795

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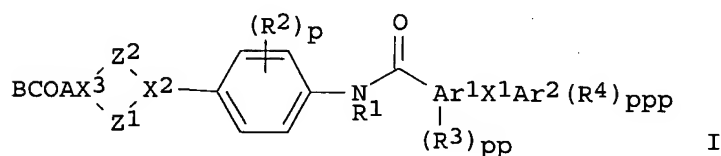
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10/049795

L4 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:185098 CAPLUS
DN 136:247608
TI Preparation of piperidinyl-, piperazinyl-, and
homopiperazinylpolyarylcaboxamides as lipid lowering agents
IN Meerpoel, Lieven; Roevens, Peter Walter Maria; Backx, Leo Jacobus Jozef;
Van der Veken, Louis Jozef Elisabeth; Viellevoe, Marcel
PA Janssen Pharmaceutica N.V., Belg.
SO PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002020501	A2	20020314	WO 2001-EP9926	20010827
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2002010468	A5	20020322	AU 2002-10468	20010827
	EP 1317431	A2	20030611	EP 2001-978313	20010827
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
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	NO 2003001001	A	20030304	NO 2003-1001	20030304
	HR 2003000156	A1	20030430	HR 2003-156	20030304
PRAI	EP 2000-203067	A	20000904		
	WO 2001-EP9926	W	20010827		
OS	MARPAT 136:247608				
GI					



AB Title compds. [I; Z1 = (CH2)n, CH2CH2O; n = 1-3; Z2 = (CH2)m; m = 1, 2; X1 = O, CH2, CO, NH, CH2O, CH2S, bond; X2, X3 = CH, N, C; R1 = H, alkyl; Ar1, Ar2 = (substituted) Ph, naphthalenyl, pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, triazinyl, triazolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, pyrrolyl, furyl, thienyl; R2, R3 = alkyl, alkoxy, halo, CF3; R4 = alkyl, alkoxy, halo, OH, SH, cyano, NO2, alkylthio, polyhaloalkyl, amino, alkylamino, dialkylamino; p, pp = 0-2; ppp = 0-3; X1, R4 taken together with Ar1 and Ar2 to which they are attached = fluoren-1-yl, fluoren-4-yl; A = alkanediyl substituted with 1-2 aryl, heteroaryl, cycloalkyl; when X3 = CH, A may also = N substituted with H, alkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl, cycloalkyl; B = H,

alkyl, aralkyl, heteroarylalkyl, (substituted) aryl, heteroaryl, etc.), and N-oxides thereof, were prepd. Thus, 4'-trifluoromethylbiphenyl-2-carboxylic acid was stirred 2 h with (COCl)₂ in CH₂Cl₂ contg. DMF; the resulting mixt. was added to a mixt. prepd. from 4-(4-aminophenyl)-.alpha.-Ph-N-(2,2,2-trifluoroethyl)-1-piperazineacetamide (prepn. given) and Et₃N in CH₂Cl₂ under ice/salt cooling followed by stirring and reflux for 2 days to give N-[4-[4-[2-oxo-1-phenyl-2-[(2,2,2-trifluoroethyl)amino]ethyl]-1-piperazinyl]phenyl]-4'-(trifluoromethyl)[1,1'-biphenyl]-2-carboxamide. The latter inhibited microsomal triglyceride transfer protein (MTP) activity with pIC₅₀ = 7.864.

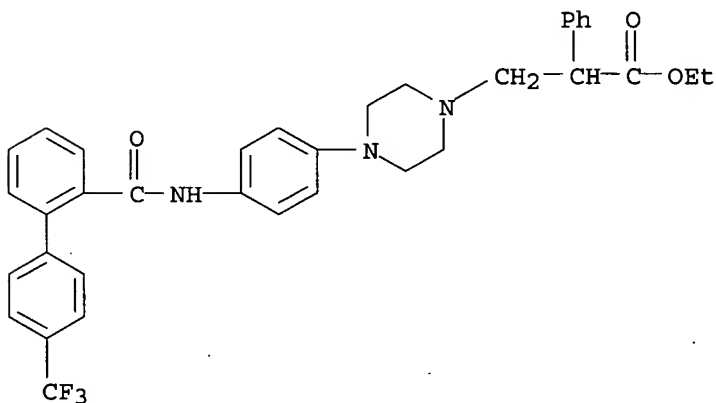
IT 403987-37-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperidinyl-, piperazinyl-, and homopiperazinylpolyarylcarboxamides as lipid lowering agents)

RN 403987-37-1 CAPLUS

CN 1-Piperazinepropanoic acid, .alpha.-phenyl-4-[4-[[[4'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]carbonyl]amino]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



IT 403987-75-7P

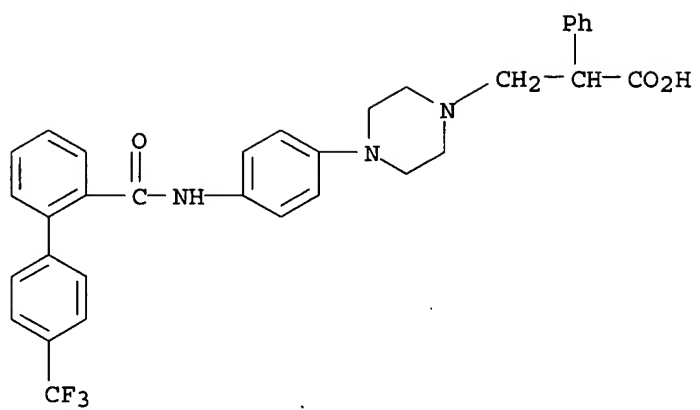
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of piperidinyl-, piperazinyl-, and homopiperazinylpolyarylcarboxamides as lipid lowering agents)

RN 403987-75-7 CAPLUS

CN 1-Piperazinepropanoic acid, .alpha.-phenyl-4-[4-[[[4'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]carbonyl]amino]phenyl]- (9CI) (CA INDEX NAME)

10/049795

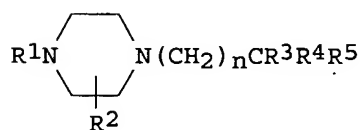


10/049795

L4 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:136796 CAPLUS
DN 134:193445
TI Preparation of arylpiperazinylpentanoates and -hexanoates as microsomal triglyceride transfer protein inhibitors.
IN Lehmann-Lintz, Thorsten; Heckel, Armin; Thomas, Leo; Mark, Michael
PA Boehringer Ingelheim Pharma KG, Germany
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

APPS PCT

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19939745	A1	20010222	DE 1999-19939745	19990821
	WO 2001014355	A1	20010301	WO 2000-EP7976	20000816
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	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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	R:				
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PRAI	DE 1999-19939516	A	19990820		
	DE 1999-19939745	A	19990821		
	WO 2000-EP7976	W	20000816		
OS	MARPAT 134:193445				
GI					



I

AB Title compds. [I; R1 = (substituted) Ph; R2 = H, alkyl; R3 = H, (substituted) alkyl, cycloalkyl, cycloalkylalkyl, Ph, naphthyl, heteroaryl; R4 = (substituted) Ph, naphthyl, heteroaryl; R5 = CO2H, (substituted) alkoxy carbonyl, cycloalkoxy carbonyl, etc.; n = 3-5], were prepd. as MTP inhibitors for redn. of plasma concn. of atherogenic lipoproteins (no data). Thus, 1-(4-nitrophenyl)piperazine, Me 5-bromo-2-methyl-2-phenylpentanoate, H2O and K2CO3 in MeCN were stirred for 6 h at 60.degree. to give Me 2-methyl-2-phenyl-5-[4-(4-nitrophenyl)piperazin-1-yl]pentanoate, which was hydrogenated over Pd/C in EtOAc/MeOH to give 91.7% Me 2-methyl-2-phenyl-5-[4-(4-aminophenyl)piperazin-1-yl]pentanoate.

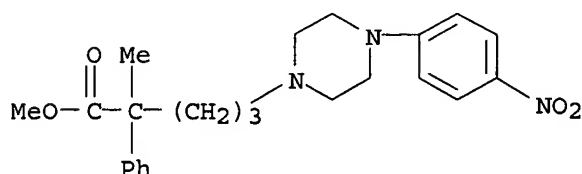
IT 327030-25-1P 327030-26-2P 327030-33-1P
327030-35-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of arylpiperazinylpentanoates and -hexanoates as microsomal triglyceride transfer protein inhibitors)

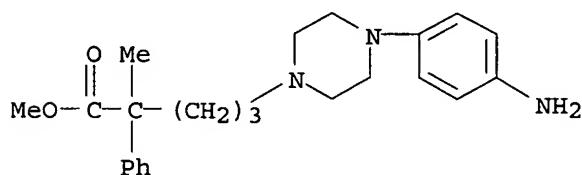
RN 327030-25-1 CAPLUS

CN 1-Piperazinepentanoic acid, .alpha.-methyl-4-(4-nitrophenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



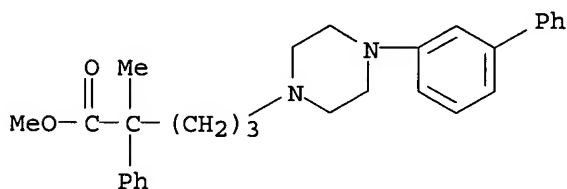
RN 327030-26-2 CAPLUS

CN 1-Piperazinepentanoic acid, 4-(4-aminophenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



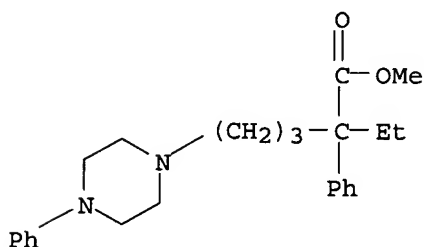
RN 327030-33-1 CAPLUS

CN 1-Piperazinepentanoic acid, 4-[1,1'-biphenyl]-3-yl-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 327030-35-3 CAPLUS

CN 1-Piperazinepentanoic acid, .alpha.-ethyl-.alpha.,4-diphenyl-, methyl ester (9CI) (CA INDEX NAME)

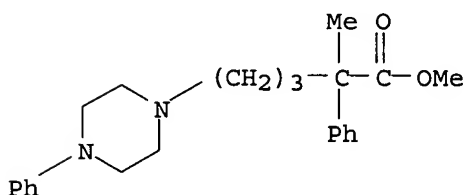


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 327030-16-0P 327030-17-1P 327030-18-2P
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 327030-22-8P 327030-23-9P 327030-24-0P
 327030-27-3P 327030-28-4P 327030-29-5P
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 327030-43-3P 327030-46-6P 327030-47-7P
 327030-48-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of arylpiperazinylpentanoates and -hexanoates as microsomal triglyceride transfer protein inhibitors)

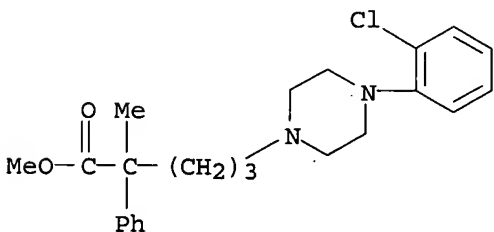
RN 327030-05-7 CAPLUS

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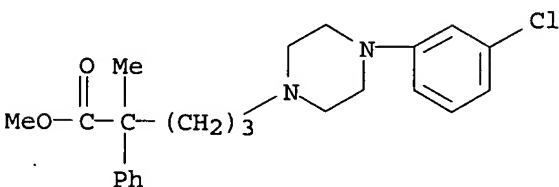
RN 327030-08-0 CAPLUS

CN 1-Piperazinepentanoic acid, 4-(2-chlorophenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



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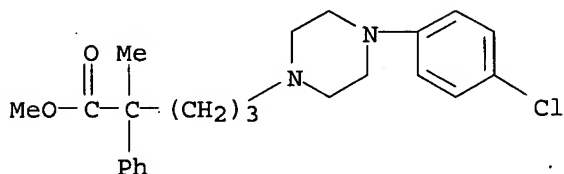
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10/049795

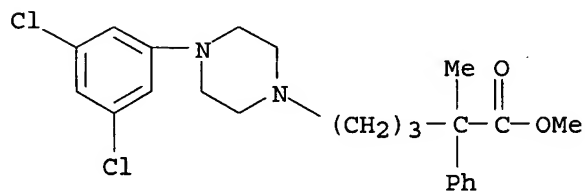
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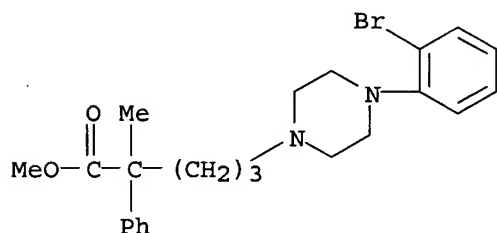
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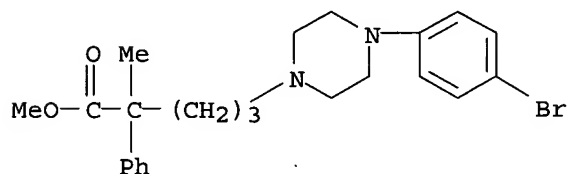
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RN 327030-13-7 CAPLUS

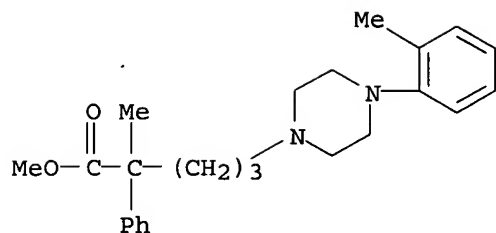
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RN 327030-14-8 CAPLUS

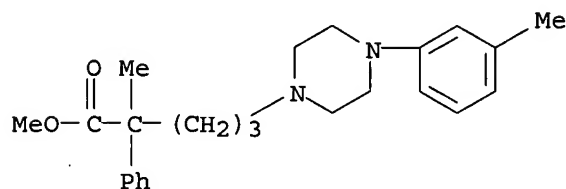
CN 1-Piperazinepentanoic acid, .alpha.-methyl-4-(2-methylphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)

10/049795



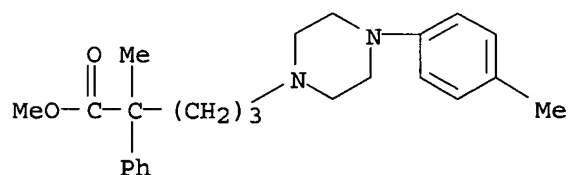
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CN 1-Piperazinepentanoic acid, .alpha.-methyl-4-(3-methylphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



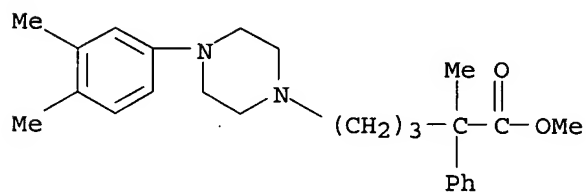
RN 327030-16-0 CAPLUS

CN 1-Piperazinepentanoic acid, .alpha.-methyl-4-(4-methylphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



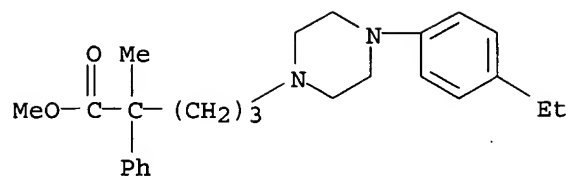
RN 327030-17-1 CAPLUS

CN 1-Piperazinepentanoic acid, 4-(3,4-dimethylphenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



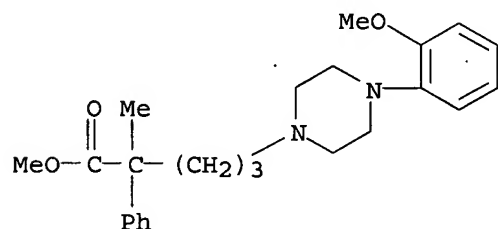
RN 327030-18-2 CAPLUS

CN 1-Piperazinepentanoic acid, 4-(4-ethylphenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



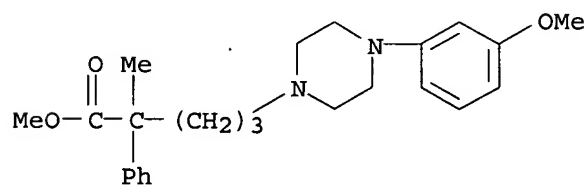
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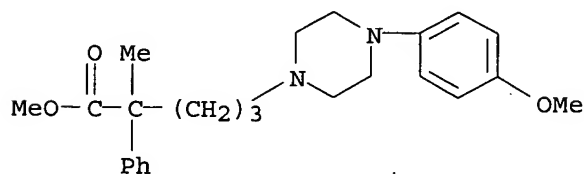
RN 327030-20-6 CAPLUS

CN 1-Piperazinepentanoic acid, 4-(3-methoxyphenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 327030-21-7 CAPLUS

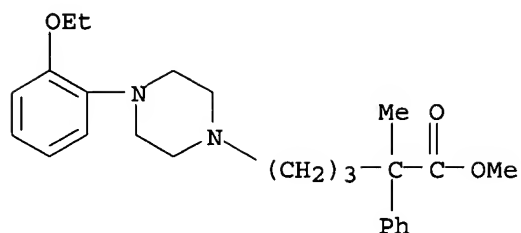
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RN 327030-22-8 CAPLUS

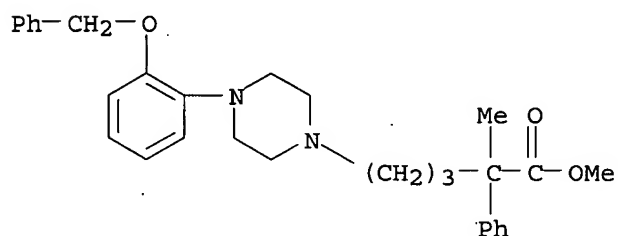
CN 1-Piperazinepentanoic acid, 4-(2-ethoxyphenyl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)

10/049795



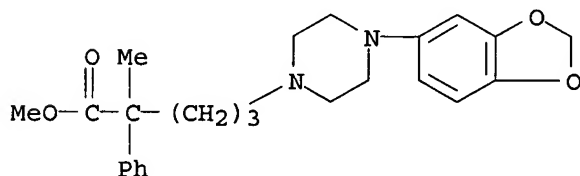
RN 327030-23-9 CAPLUS

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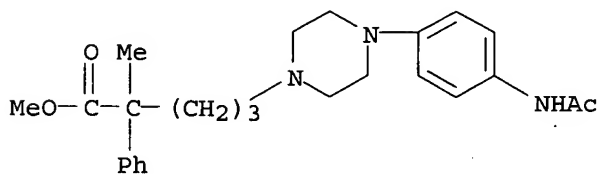
RN 327030-24-0 CAPLUS

CN 1-Piperazinepentanoic acid, 4-(1,3-benzodioxol-5-yl)-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



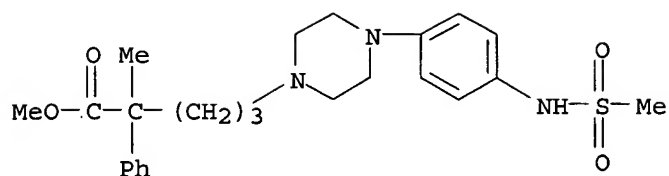
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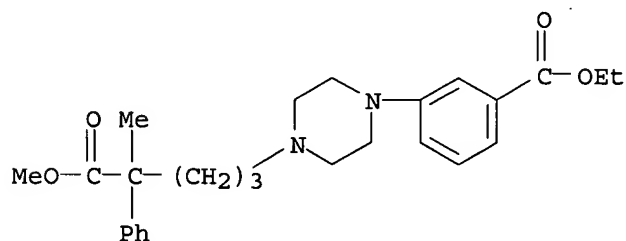
RN 327030-28-4 CAPLUS

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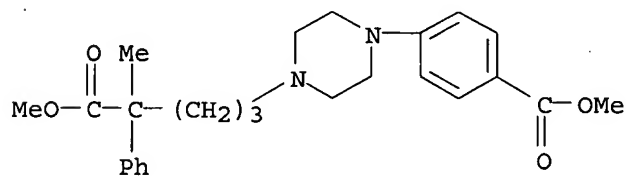
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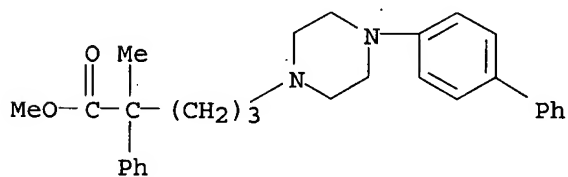
RN 327030-30-8 CAPLUS

CN 1-Piperazinepentanoic acid, 4-[4-(methoxycarbonyl)phenyl]-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 327030-31-9 CAPLUS

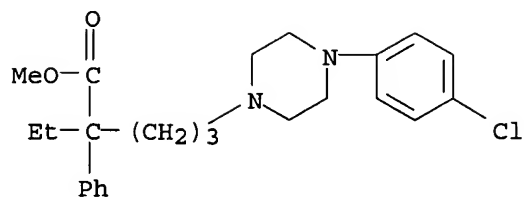
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RN 327030-36-4 CAPLUS

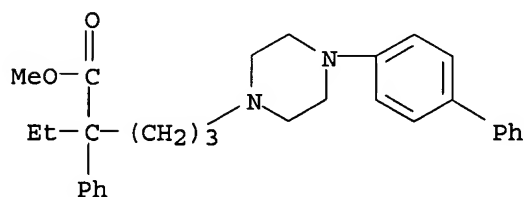
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10/049795



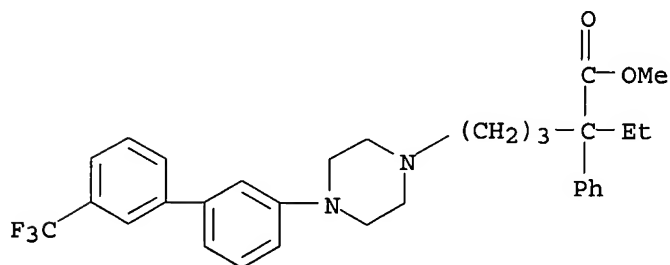
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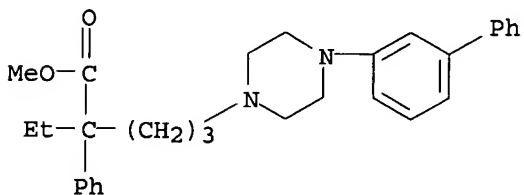
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CN 1-Piperazinepentanoic acid, .alpha.-ethyl-.alpha.-phenyl-4-[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 327030-42-2 CAPLUS

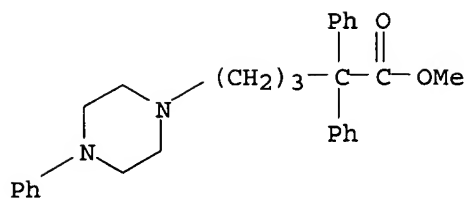
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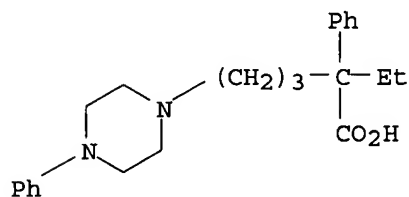
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CN 1-Piperazinepentanoic acid, .alpha.,.alpha.,4-triphenyl-, methyl ester (9CI) (CA INDEX NAME)

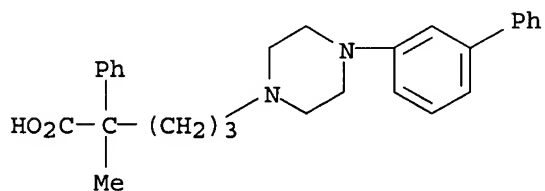
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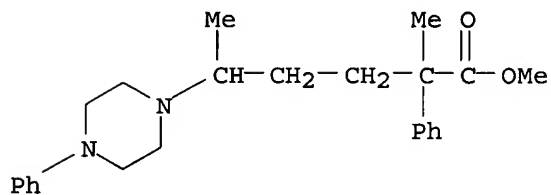


RN 327030-47-7 CAPLUS
CN 1-Piperazinepentanoic acid, 4-[1,1'-biphenyl]-3-yl-.alpha.-methyl-.alpha.-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



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RN 327030-48-8 CAPLUS
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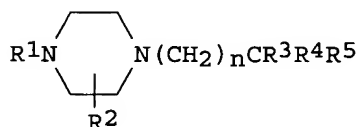


10/049795

L4 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:136770 CAPLUS
DN 134:193434
TI Preparation of arylpiperazinylpentanecarboxylates and -hexanecarboxylates
as inhibitors of microsomal triglyceride transfer protein.
IN Lehmann-Lintz, Thorsten; Heckel, Armin; Thomas, Leo; Mark, Michael
PA Boehringer Ingelheim Pharma KG, Germany
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

SAME AS ANS 2 ALSO CT

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	WO 2001014355	A1	20010301	WO 2000-EP7976	20000816
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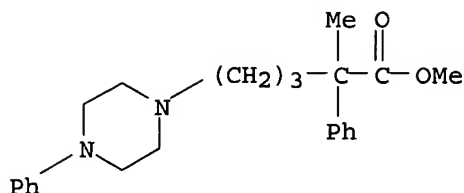
AB Title compds. [I; n = 3, 4, 5; R¹ = (substituted) Ph; R² = H, alkyl; R³ = H, alkyl, cycloalkyl, cycloalkylalkyl, (substituted) Ph, naphthyl, heteroaryl; R⁴ = (substituted) Ph, naphthyl, heteroaryl; R⁵ = CO₂H, (substituted) alkoxy carbonyl, cycloalkoxy carbonyl], were prepd. to reduce plasma levels of arterogenic lipoproteins (no data). Thus, 1-phenylpiperazine, Me 5-bromo-2-methyl-2-phenylpentanoate (prepn. given), and Et₃N were stirred 42 h in MeOH to give 29.2% Me 2-methyl-2-phenyl-5-(4-phenylpiperazin-1-yl)pentanoate.

IT 327030-05-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of arylpiperazinylpentanecarboxylates and -hexanecarboxylates as inhibitors of microsomal triglyceride transfer protein)

RN 327030-05-7 CAPLUS
CN 1-Piperazinepentanoic acid, .alpha.-methyl-.alpha.,4-diphenyl-, methyl

10/049795

ester (9CI) (CA INDEX NAME)



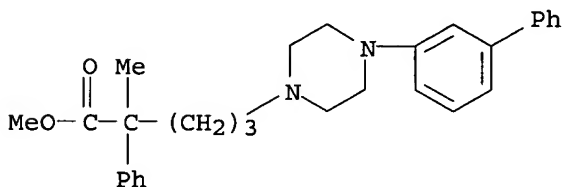
IT 327030-33-1P 327030-35-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of arylpiperazinylpentanecarboxylates as inhibitors of microsomal triglyceride transfer protein)

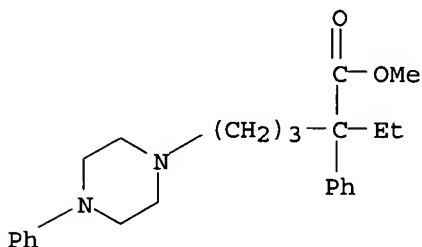
RN 327030-33-1 CAPLUS

CN 1-Piperazinepentanoic acid, 4-[1,1'-biphenyl]-3-yl-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



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CN 1-Piperazinepentanoic acid, .alpha.-ethyl-.alpha.,4-diphenyl-, methyl ester (9CI) (CA INDEX NAME)



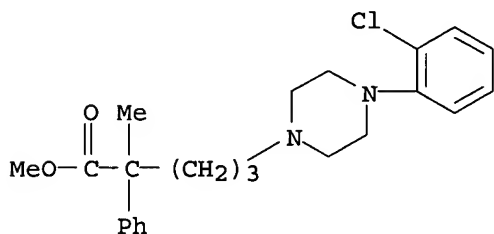
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327030-17-1P 327030-18-2P 327030-19-3P
327030-20-6P 327030-21-7P 327030-22-8P
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327030-29-5P 327030-30-8P 327030-31-9P
327030-36-4P 327030-37-5P 327030-38-6P
327030-42-2P 327030-43-3P 327030-46-6P
327030-47-7P 327030-48-8P

10/049795

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of arylpiperazinylpentanecarboxylates as inhibitors of microsomal triglyceride transfer protein)

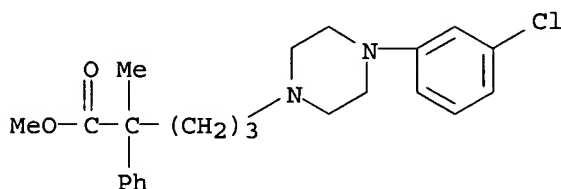
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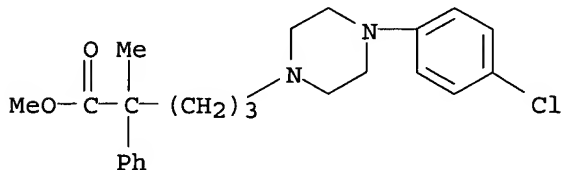
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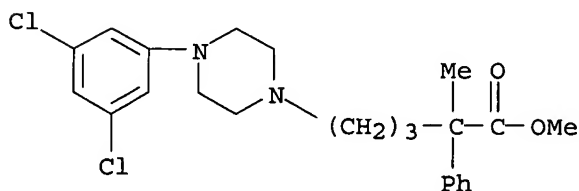
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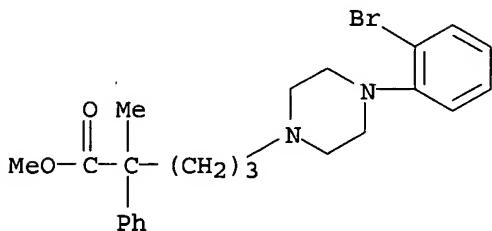
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10/049795

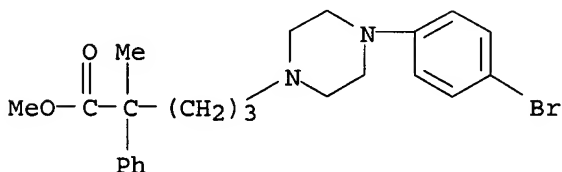
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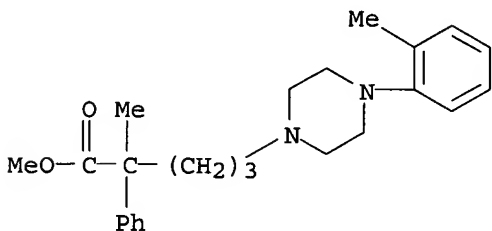
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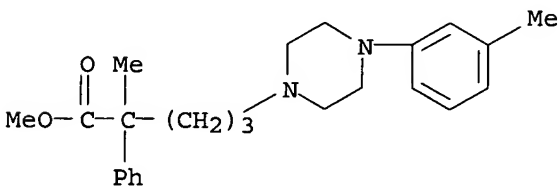
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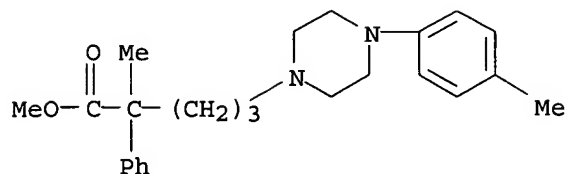


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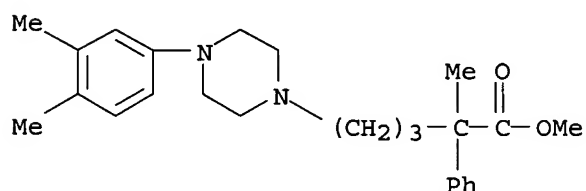
10/049795

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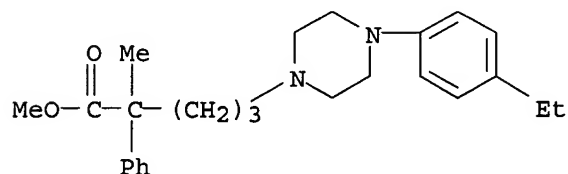
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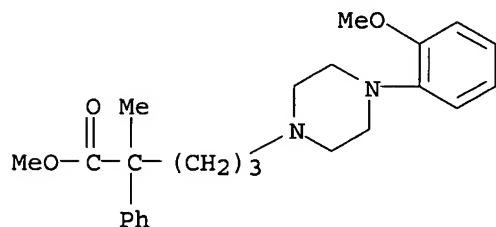
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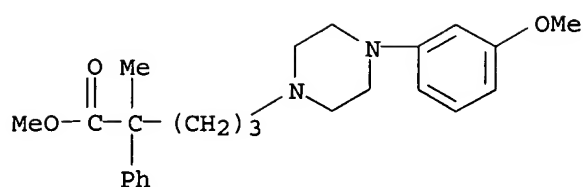
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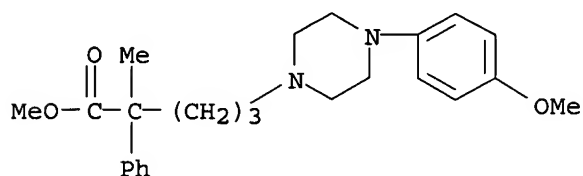
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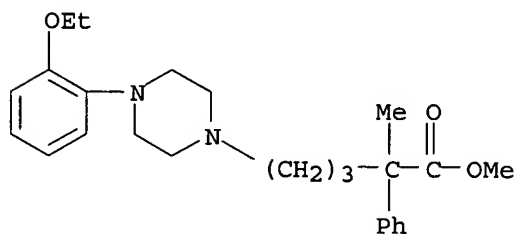
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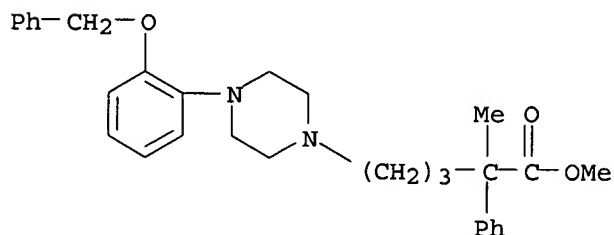
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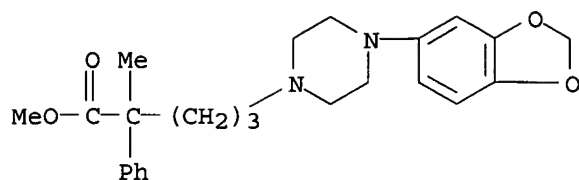
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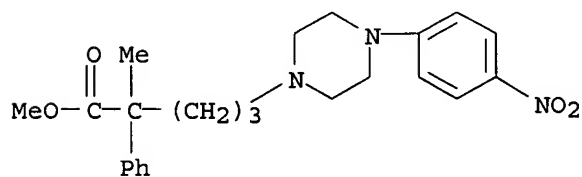
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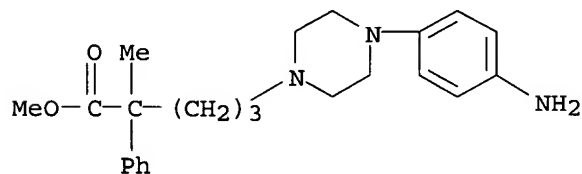
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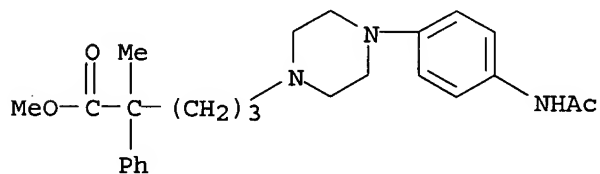
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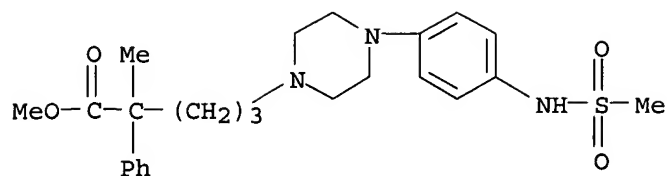
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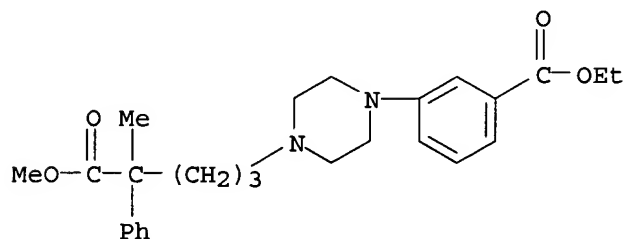
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10/049795



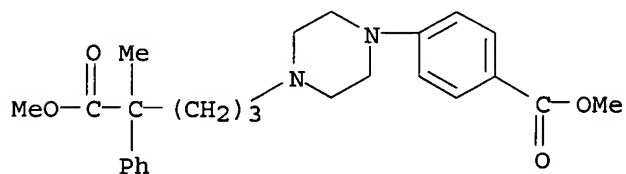
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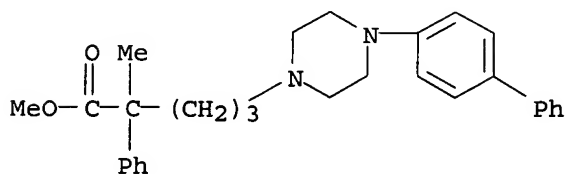
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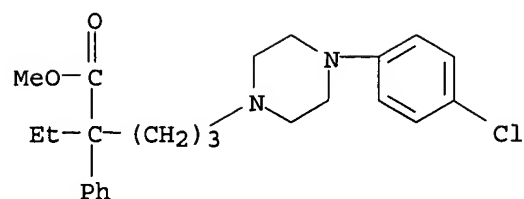
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CN 1-Piperazinepentanoic acid, 4-[1,1'-biphenyl]-4-yl-.alpha.-methyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



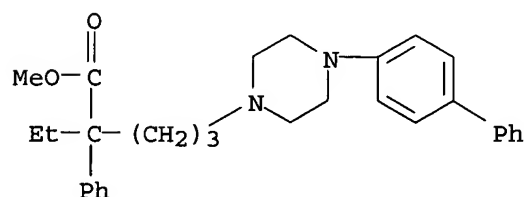
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CN 1-Piperazinepentanoic acid, 4-(4-chlorophenyl)-.alpha.-ethyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



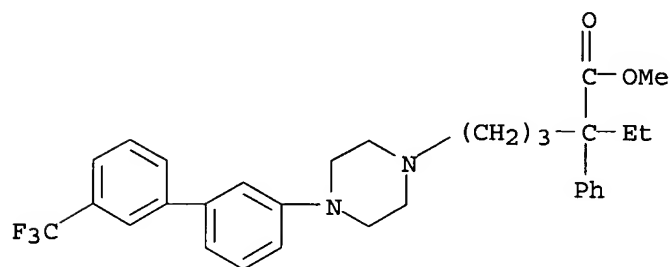
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CN 1-Piperazinepentanoic acid, 4-[1,1'-biphenyl]-4-yl-.alpha.-ethyl-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



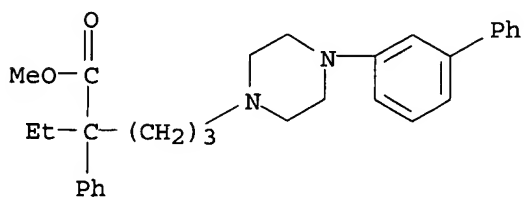
RN 327030-38-6 CAPLUS

CN 1-Piperazinepentanoic acid, .alpha.-ethyl-.alpha.-phenyl-4-[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 327030-42-2 CAPLUS

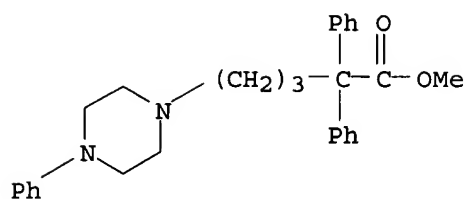
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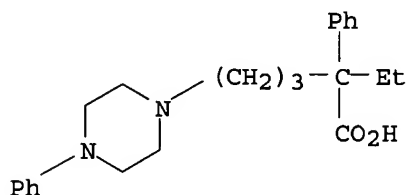
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10/049795



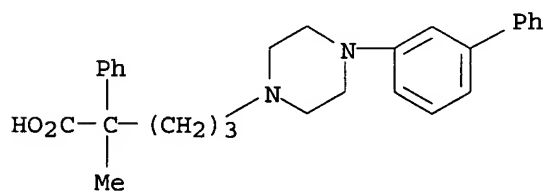
RN 327030-46-6 CAPLUS

CN 1-Piperazinepentanoic acid, .alpha.-ethyl-.alpha.,4-diphenyl- (9CI) (CA INDEX NAME)



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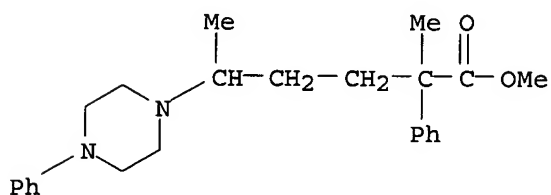
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● 2 HCl

RN 327030-48-8 CAPLUS

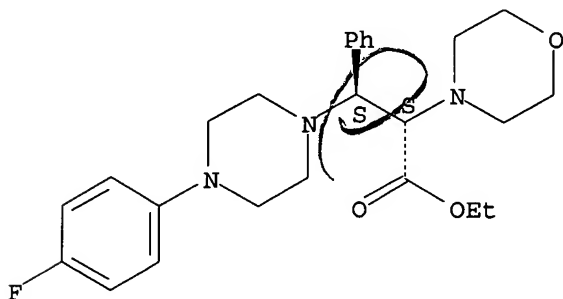
CN 1-Piperazinepentanoic acid, .alpha.,.delta.-dimethyl-.alpha.,4-diphenyl-, methyl ester (9CI) (CA INDEX NAME)



10/049795

L4 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:758683 CAPLUS
DN 134:71128
TI Applications of Aziridinium Ions. Selective Syntheses of
.alpha.,.beta.-Diamino Esters, .alpha.-Sulfanyl-.beta.-amino Esters,
.beta.-Lactams, and 1,5-Benzodiazepin-2-one
AU Chuang, Tsung-Hsun; Sharpless, K. Barry
CS Department of Chemistry and the Skaggs Institute for Chemical Biology, The
Scripps Research Institute, La Jolla, CA, 92037, USA
SO Organic Letters (2000), 2(23), 3555-3557
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 134:71128
AB A variety of nucleophiles, including amines, thiolates, and alkoxides,
were employed to open aziridinium ions. The latter are opened
stereospecifically and regioselectively at the C-3 position by a wide
range of amines, and thiolate nucleophiles attack predominately at the C-2
position. Poor regioselectivities (ca. 1:1) were obsd. using nucleophiles
derived from phenols, carboxylic acids, and imides. Base-mediated ring
closure of the aziridinium opening products, from primary amines, gave
.beta.-lactams and a 1,5-benzodiazepin-2-one in high yields.
IT 314277-96-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(ring cleavage of aziridinium ions via reactions with amines,
thiolates, and alkoxides)
RN 314277-96-8 CAPLUS
CN 4-Morpholineacetic acid, .alpha.-[(R)-[4-(4-fluorophenyl)-1-
piperazinyl]phenylmethyl]-, ethyl ester, (.alpha.R)-rel- (9CI) (CA INDEX
NAME)

Relative stereochemistry.

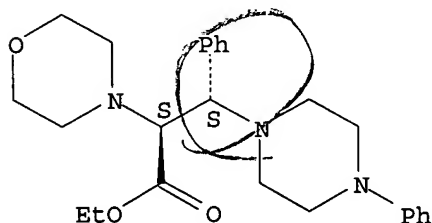


RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/049795

L4 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:634691 CAPLUS
DN 132:22730
TI Applications of Aziridinium Ions. Selective Syntheses of
.beta.-Aryl-.alpha.,.beta.-diamino Esters
AU Chuang, Tsung-Hsun; Sharpless, K. Barry
CS Department of Chemistry and the Skaggs Institute for Chemical Biology, The
Scripps Research Institute, La Jolla, CA, 92037, USA
SO Organic Letters (1999), 1(9), 1435-1437
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 132:22730
AB .alpha.,.beta.-Diamino esters are readily prepd. through stereospecific
and regioselective opening of an aziridinium ion intermediate with a
variety of amines. The aziridinium ion is generated from the epoxide in
two steps.
IT 251967-14-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of .beta.-aryl-.alpha.,.beta.-diamino esters through
stereospecific and regioselective opening of an aziridinium ion
intermediate)
RN 251967-14-3 CAPLUS
CN 4-Morpholineacetic acid, .alpha.-[(R)-phenyl(4-phenyl-1-
piperazinyl)methyl]-, ethyl ester, (.alpha.R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/049795

L4 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1997:128095 CAPLUS
DN 126:166501
TI N-Heterocycloalkyl carboxamides as serotonergic agents
IN Baudy, Reinhardt B.; Berta, Scott C.
PA American Home Products Corporation, USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5602128	A	19970211	US 1994-348651	19941202
PRAI	US 1994-348651		19941202		
OS	MARPAT 126:166501				

AB 4-[4-(2-Methoxyphenyl)piperazin-1-yl]-N-[(thio)morpholinyl]-2-phenylbutyramides and a pharmaceutically acceptable salt thereof, are useful as anxiolytic/antidepressant agents. Coupling of 4-[4-(2-methoxyphenyl)piperazin-1-yl]-2-phenylbutanoic acid with 4-(2-aminoethyl)morpholine in presence of triethylamine and N,N-bis(2-oxo-3-oxazolidinyl)phosphoramidic chloride gave 4-[4-(2-methoxyphenyl)piperazin-1-yl]-N-(2-morpholin-4-ylethyl)-2-phenylbutyramide (I). I displayed potent affinity for the serotonin 5-HT_{1A} receptor.

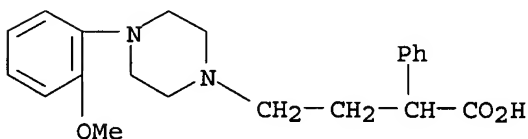
IT 156818-13-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(4-[4-(2-methoxyphenyl)piperazin-1-yl]-N-[(thio)morpholinyl]-2-phenylbutyramides as serotonergic agents)

RN 156818-13-2 CAPLUS

CN 1-Piperazinebutanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)



homology.

L4 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1996:446471 CAPLUS
DN 125:114692
TI Preparation of piperazine-containing bicyclic carboxamides as 5-HT1a
receptor antagonists
IN Cliffe, Ian Anthony; Mansell, Howard Langham; Ward, Terence James; Nelson,
James Albert; Shah, Uresh Shantilal; Kanzelberger, Mira Ana
PA Wyeth, John, and Brother Ltd., UK; American Home Products Corporation
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

$$\text{RN} \begin{array}{c} \diagup \\ \diagdown \end{array} \text{NACHCON} \begin{array}{c} \diagup \\ \diagdown \end{array} \begin{array}{c} (\text{CH}_2)_m \text{CR}^2 \text{---} \text{CH}_2 \\ | \\ (\text{CH}_2)_p \\ | \\ (\text{CH}_2)_n \text{CR}^2 \text{---} \text{CH}_2 \end{array} \begin{array}{c} \text{---} \text{CH}_2 \\ | \\ \text{X} \\ | \\ \text{---} \text{CH}_2 \end{array} \quad \text{I}$$

Page 28

10/049795

4-[4-(2-methoxyphenyl)piperazin-1-yl]-2-phenylbutanoic acid was condensed with desmethyltropine and the resultant free base salified with aq. HCl, producing 1-(8-azabicyclo[3.2.1]oct-8-yl)-4-[4-(2-methoxyphenyl)piperazin-1-yl]-2-phenylbutan-1-one hydrochloride hemihydrate, m.p. 225-228.degree. (decompn.), which demonstrated a IC50 of 3.3 nM in a rat hippocampal membrane homogenate-derived 5-HT1a receptor-binding assay.

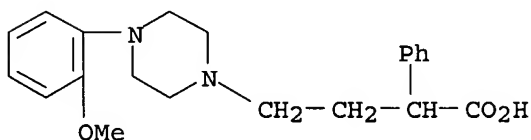
IT 156818-13-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of piperazine-contg. bicyclic carboxamides as 5-HT1a receptor antagonists)

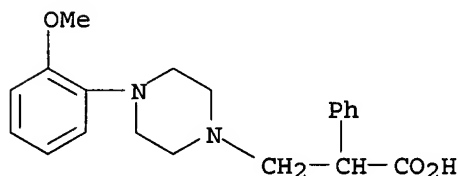
RN 156818-13-2 CAPLUS

CN 1-Piperazinebutanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)



10/049795

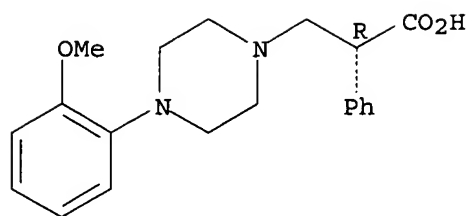
L4 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1996:123207 CAPLUS
DN 124:249645
TI Structure-activity relationship studies of CNS agents. Part 24. New
analogs of N-tert.-butyl-3-[4-(2-methoxyphenyl)-1-piperazinyl]-2-
phenylpropanamide
AU Boksa, J.; Klodzinska, Aleksandra; Charakchieva-Minol, Sijka;
Chojnacka-Wojcik, Ewa; Mokrosz, J. L.
CS Inst. Pharmacology, Polish Acad. Sci., Krakow, Pol.
SO Pharmazie (1996), 51(2), 72-6
CODEN: PHARAT; ISSN: 0031-7144
PB Govi-Verlag Pharmazeutischer Verlag
DT Journal
LA English
AB A series of new N-substituted derivs. of 3-[4-(2-methoxyphenyl)-1-
piperazinyl]-2-phenylpropanamide were synthesized and their 5-HT_{1A},
5-HT_{2A}, and .alpha.1 receptor affinities were detd. All the compds. were
highly potent 5-HT_{1A} ligands with a moderate or low 5-HT_{2A} and .alpha.1
affinity. The 5-HT_{2A} affinity of these compds. depended on the vol. of
amide substituents. None of the investigated racemic mixts. antagonized
the 8-OH-DPAT-induced lower lip retraction in rats.
IT 129394-10-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and structure-5-HT receptor agonist activity relations of
arylpiperazine derivs.)
RN 129394-10-1 CAPLUS
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA
INDEX NAME)



IT 175274-25-6P 175274-26-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation)
(prepn. and structure-5-HT receptor agonist activity relations of
arylpiperazines)
RN 175274-25-6 CAPLUS
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-,
dihydrochloride, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/049795

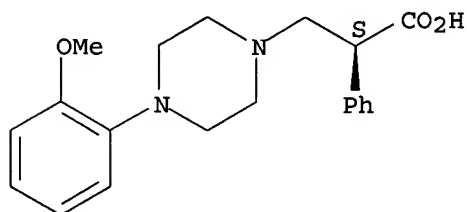


●2 HCl

RN 175274-26-7 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-,
dihydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

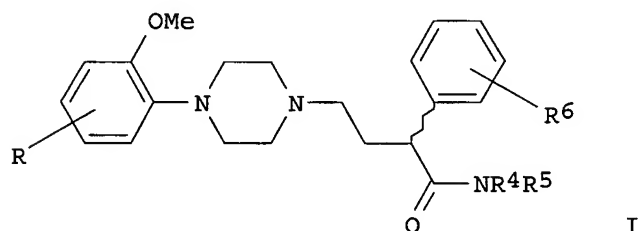


●2 HCl

10/049795

L4 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:947094 CAPLUS
DN 124:146200
TI 4-[4-(2-Methoxyphenyl)piperazin-1-yl]-2-phenyl-N-alkynylbutyramides as
serotonergic agents
IN Baudy, Reinhardt B.; Berta, Scott C.
PA American Home Products Corp., USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5451584	A	19950919	US 1994-337810	19941110
PRAI	US 1994-337810		19941110		
OS	MARPAT 124:146200				
GI					



AB Carboxamides I where: R and R6 are members independently selected from the group consisting of H, CN, OR2, NO2, NR2R3, NR2COR3, NR2COOR3, COR2, COOR2, CONR2R3, SR2, SOR2, SO2R2, SO2NR2R3, alkyl of 1 to 6 carbon atoms, alkenyl of 2 to 6 carbon atoms, alkynyl of 2 to 6 carbon atoms, perhaloalkyl of 1 to 6 carbon atoms, and a halogen; in which R2 and R3 are alkyl of 1 to 6 carbon atoms, alkenyl of 2 to 6 carbon atoms, alkynyl of 2 to 6 carbon atoms, Ph, or benzyl; R4 is a member selected from the group consisting of H, alkyl of 1 to 6 carbon atoms, alkenyl of 2 to 6 carbon atoms and alkynyl of 2 to 6 carbon atoms; R5 is alkynyl of 2 to 8 carbon atoms or 1-alkynylcycloalkyl in which the alkynyl group has 2 to 6 carbon atoms and the cycloalkyl group has 3 to 10 carbon atoms; or a pharmaceutically acceptable salt thereof, are useful anxiolytic/antidepressant agents. Thus, e.g., coupling of 4-[4-(2-methoxyphenyl)piperazin-1-yl]-2-phenylbutanoic acid with propargylamine in presence of triethylamine and N,N-bis(2-oxo-3-oxazolidinyl)phosphoramidic chloride, followed by treatment with ethanolic HCl afforded 4-[4-(2-methoxyphenyl)piperazin-1-yl]-2-phenyl-N-prop-2-ynylbutyramide dihydrochloride (I.2HCl; R = R6 = H, NR4R5 = propargylamino) which displayed high affinity for the serotonin 5-HT1A receptor subtype, with IC50 = 44.9 nM.

IT 156818-13-2

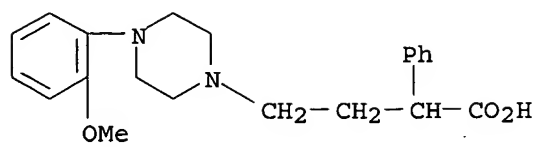
RL: RCT (Reactant); RACT (Reactant or reagent)

(4-[4-(2-methoxyphenyl)piperazin-1-yl]-2-phenyl-N-alkynylbutyramides as serotonergic agents useful as anxiolytics/antidepressants)

RN 156818-13-2 CAPLUS

CN 1-Piperazinebutanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)

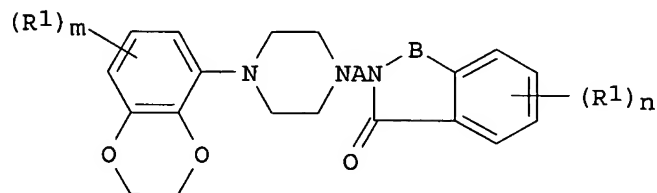
10/049795



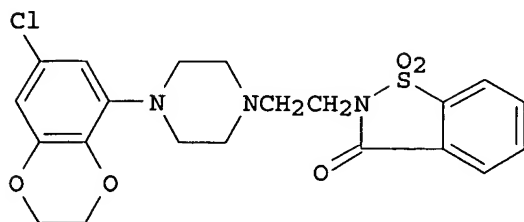
10/049795

L4 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:422806 CAPLUS
DN 122:187611
TI Preparation of 2,3-dihydro-1,4-benzodioxin-5-yl-piperazine derivatives
having 5-HT1a-antagonistic activity.
IN Hartog, Jan; Van Steen, B. J.; Mos, Johannes; Schipper, Jacques
PA Duphar International Research B.V., Neth.
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 633260	A1	19950111	EP 1994-201900	19940701
	EP 633260	B1	20011107		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	CA 2127084	AA	19950106	CA 1994-2127084	19940629
	FI 9403149	A	19950106	FI 1994-3149	19940630
	NO 9402471	A	19950106	NO 1994-2471	19940630
	JP 07215972	A2	19950815	JP 1994-170370	19940630
	US 5462942	A	19951031	US 1994-269086	19940630
	HU 75155	A2	19970428	HU 1994-1965	19940630
	HU 218215	B	20000628		
	CZ 286503	B6	20000412	CZ 1994-1597	19940630
	SK 281681	B6	20010611	SK 1994-788	19940630
	ZA 9404787	A	19950220	ZA 1994-4787	19940701
	CN 1106813	A	19950816	CN 1994-115999	19940701
	CN 1044244	B	19990721		
	AT 208385	E	20011115	AT 1994-201900	19940701
	ES 2167346	T3	20020516	ES 1994-201900	19940701
	AU 9466139	A1	19950112	AU 1994-66139	19940704
	AU 680900	B2	19970814		
	RU 2118322	C1	19980827	RU 1994-23250	19940704
	IL 110209	A1	20000229	IL 1994-110209	19940704
PRAI	EP 1993-201950	A	19930705		
OS	CASREACT 122:187611; MARPAT 122:187611				
GI					



I



II

AB Title compds. (I; R1 = halo, lower alkyl, alkoxy, OH, CF3, cyano; m = 1,2; n = 0,1; A = C2-6 alkylene which may be substituted with .gtoreq.1 lower alkyl groups or a monocyclic (hetero)aryl group; B = CH2, CH2CH2, CO, S, SO, SO2), were prepd. Thus, saccharin was heated with 1-(7-chloro-2,3-dihydro-1,4-benzodioxin-5-yl)-4-(2-chloroethyl)piperazine and NaH in DMF to give title compd. (II). In general I were selective for 5-HT1a receptors, antagonize the effects of 8-OH-DPAT in rats, and have good oral bioavailability.

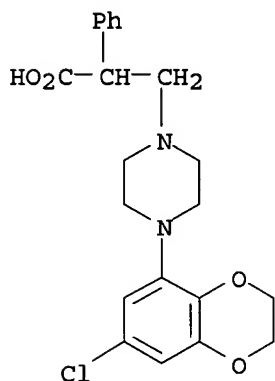
IT 161612-51-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 2,3-dihydro-1,4-benzodioxin-5-yl-piperazine derivs. having 5-HT1a-antagonistic activity)

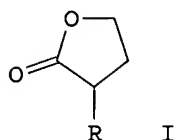
RN 161612-51-7 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(7-chloro-2,3-dihydro-1,4-benzodioxin-5-yl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1994:533946 CAPLUS
 DN 121:133946
 TI Preparation of .alpha.-aryl-.gamma.-butyrolactones
 IN Shepherd, Robin Gerald
 PA Wyeth, John, and Brother Ltd., UK
 SO PCT Int. Appl., 13 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9412487	A1	19940609	WO 1993-GB2427	19931125
	W: AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2150948	AA	19940609	CA 1993-2150948	19931125
	AU 9455324	A1	19940622	AU 1994-55324	19931125
	EP 672039	A1	19950920	EP 1994-900256	19931125
	EP 672039	B1	19970709		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	JP 08503939	T2	19960430	JP 1994-512915	19931125
	JP 3274866	B2	20020415		
	AT 155134	E	19970715	AT 1994-900256	19931125
	ES 2105597	T3	19971016	ES 1994-900256	19931125
	ZA 9308873	A	19950526	ZA 1993-8873	19931126
	US 5629432	A	19970513	US 1995-436186	19950516
PRAI	GB 1992-25257	A	19921203		
	WO 1993-GB2427	W	19931125		
OS	CASREACT 121:133946; MARPAT 121:133946				
GI					

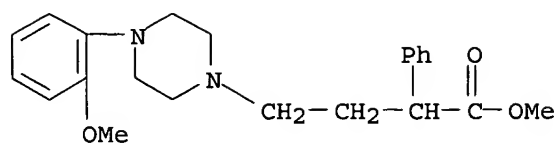


AB Title compds. [I; R = (un)substituted Ph, or (bicyclic)heteroaryl] were prepd. by condensation of RCH(CO₂R₁)CO₂R₂ (R₁, R₂ = alkyl) with YCH₂CH₂OZ (Y = leaving group; Z = protecting group) to give RC(CO₂R₁)(CO₂R₂)CH₂CH₂OZ followed by hydrolysis. The lactones are of use as intermediates for prepg. 5-HT_{1A} binding agents (sic). Thus, PhCH(CO₂Et)₂ was condensed with BrCH₂CH₂OAc to give PhC(CO₂Et)₂CH₂CH₂OAc which was refluxed 2h with NaOH in aq. MeOH to give 89% (this step) I (R = Ph). The latter was converted in 6 steps to (-)-2,3,4,5,6,7-hexahydro-1-[4-[4-(2-methoxyphenyl)piperazinol]-2-phenylbutyryl]-1H-azepine hydrochloride.

IT 141733-63-3P 156818-13-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. and reaction of, in prepn. of drug)

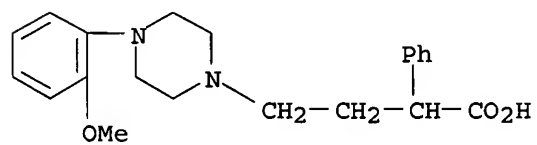
RN 141733-63-3 CAPLUS
 CN 1-Piperazinebutanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)

10/049795



RN 156818-13-2 CAPLUS

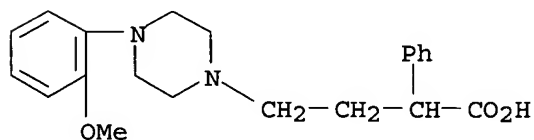
CN 1-Piperazinebutanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)



10/049795

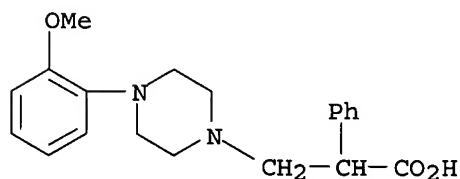
L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1994:491799 CAPLUS
DN 121:91799
TI Pharmaceutical piperazine derivatives
IN Cliffe, Ian Anthony; Ifill, Anderson Decourtney; White, Alan Chapman
PA Wyeth, John, and Brother Ltd., UK
SO Brit. UK Pat. Appl., 12 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	GB 2271930	A1	19940504	GB 1993-21690	19931021
	GB 2271930	B2	19960724		
PRAI	GB 1992-23014		19921103		
AB	4-[4-(2-Methoxyphenyl)piperazin-1-yl]-2-phenylbutanoic acid and the pharmaceutically acceptable salts thereof are useful as 5-HT1A-antagonists. The compds. act primarily at peripheral 5-HT1A sites and can be used in treating gastrointestinal disorders in humans and other mammals.				
IT	156818-13-2P RL: PREP (Preparation) (prepn. of, as 5-HT1A antagonist)				
RN	156818-13-2 CAPLUS				
CN	1-Piperazinebutanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)				



10/049795

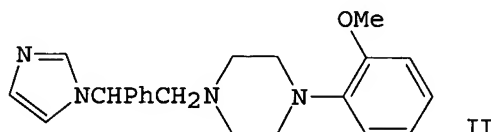
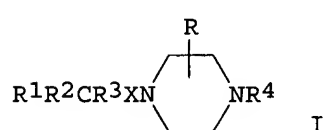
L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1993:485794 CAPLUS
DN 119:85794
TI (S)-N-tert-Butyl-3-(4-(2-methoxyphenyl)piperazin-1-yl)-2-phenylpropanamide
[(S)-WAY-100135]: a selective antagonist at presynaptic and postsynaptic
5-HT1A receptors
AU Cliffe, Ian A.; Brightwell, Christopher I.; Fletcher, Allan; Forster,
Elaine A.; Mansell, Howard L.; Reilly, Yvonne; Routledge, Carol; White,
Alan C.
CS Dep. Med. Chem., Wyeth Res. (UK), Taplow/Berkshire, SL6 0PH, UK
SO Journal of Medicinal Chemistry (1993), 36(10), 1509-10
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
AB The synthesis and pharmacol. properties of S-(+)-WAY-100135 are reported.
The compd. was a highly selective and potent antagonist at presynaptic and
postsynaptic 5-HT1A receptors. The binding affinity at 5-HT1A sites was
15.5 nM and the affinity at other 5-HT, noradrenergic, and dopaminergic D2
sites was >1000 nM. In rats, (S)-WAY-100135 did not produce 5-HT1A
agonist-like behaviors (up to 10 mg/kg i.v.) but blocked the effects of
8-OH-DPAT. Microdialysis expts. showed that (S)-WAY-100135 at 10 mg/kg
s.c. was without a significant effect on extracellular levels of 5-HT in
the rat brain hippocampus and completely blocked the effects of 8-OH-DPAT.
IT 129394-10-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of, with butylamine)
RN 129394-10-1 CAPLUS
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA
INDEX NAME)



10/049795

L4 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1992:490321 CAPLUS
DN 117:90321
TI Piperazine derivatives
IN Ward, Terence James; Warrellow, Graham John
PA John Wyeth and Brother Ltd., UK
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 479546	A2	19920408	EP 1991-308969	19911001
	EP 479546	A3	19920603		
	EP 479546	B1	19961030		
	R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE				
	AU 9184883	A1	19920409	AU 1991-84883	19910930
	AU 642532	B2	19931021		
	US 5177078	A	19930105	US 1991-768147	19910930
	GB 2248616	A1	19920415	GB 1991-20856	19911001
	GB 2248616	B2	19940615		
	JP 04257570	A2	19920911	JP 1991-253585	19911001
	AT 144772	E	19961115	AT 1991-308969	19911001
	ES 2094204	T3	19970116	ES 1991-308969	19911001
	CA 2052619	AA	19920404	CA 1991-2052619	19911002
	HU 59394	A2	19920528	HU 1991-3160	19911003
	HU 217813	B	20000428		
	IL 101166	A1	20000813	IL 1992-101166	19920306
PRAI	GB 1990-21453	A	19901003		
OS	MARPAT 117:90321				
GI					



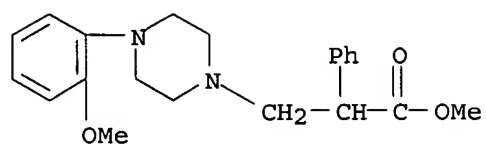
AB Piperazines I (X = alkylene; R = H, alkyl; R1, R4 = aryl, heteroaryl; R2 = mono- or bicyclic heterocyclic; R3 = H, OH, alkyl) were prepd. Thus, 1-(2-methoxyphenyl)piperazine was treated with styrene oxide followed by imidazole to give the piperazine II. II had 5-hydroxytryptamine type 1A receptor antagonist activity in rats at a min. ED of 1 mg/kg s.c. and 10 mg/kg orally.

IT 132708-57-7 141733-63-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with acetamidoxime)

RN 132708-57-7 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)

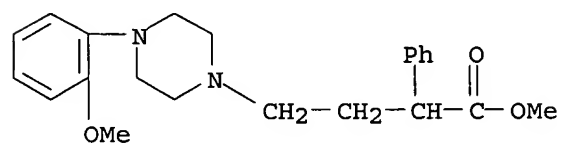
10/049795



S.M

RN 141733-63-3 CAPLUS

CN 1-Piperazinebutanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)

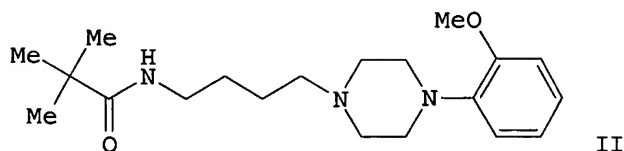
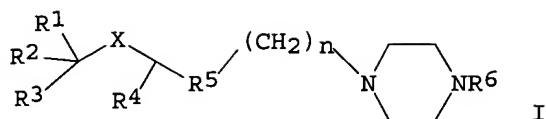


S.M.

10/049795

L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1991:164279 CAPLUS
DN 114:164279
TI Preparation of 1-aryl-4-carboxyalkylpiperazines and related compounds as
5HT1A antagonists
IN Cliffe, Ian Anthony; Abou-Gharbia, Magid Abdel Megid; Yardley, John
Patrick
PA American Home Products Corp., USA; Wyeth, John, and Brother Ltd.
SO Eur. Pat. Appl., 37 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 395313	A2	19901031	EP 1990-304251	19900420
	EP 395313	A3	19910508		
	EP 395313	B1	19991215		
	R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE				
	US 4988814	A	19910129	US 1989-428148	19891027
	CA 2015033	AA	19901022	CA 1990-2015033	19900420
	AU 9053778	A1	19901025	AU 1990-53778	19900420
	AU 619677	B2	19920130		
	GB 2230780	A1	19901031	GB 1990-8924	19900420
	GB 2230780	B2	19921021		
	HU 54667	A2	19910328	HU 1990-2503	19900420
	DD 296921	A5	19911219	DD 1990-339954	19900420
	ZA 9003019	A	19911224	ZA 1990-3019	19900420
	ZA 9003020	A	19911224	ZA 1990-3020	19900420
	DD 297968	A5	19920130	DD 1990-339955	19900420
	FI 93832	B	19950228	FI 1990-1982	19900420
	FI 93832	C	19950612		
	EP 955296	A2	19991110	EP 1999-108070	19900420
	EP 955296	A3	20000119		
	R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE				
	AT 187718	E	20000115	AT 1990-304251	19900420
	ES 2140374	T3	20000301	ES 1990-304251	19900420
	JP 03020263	A2	19910129	JP 1990-106300	19900421
	JP 3054677	B2	20000619		
	IL 94160	A1	19940624	IL 1990-94160	19900422
	US 5364849	A	19941115	US 1992-911996	19920710
	GB 2255976	A1	19921125	GB 1992-15425	19920720
	GB 2255976	B2	19921125		
	US 5382583	A	19950117	US 1992-998887	19921229
	US 5340812	A	19940823	US 1993-1428	19930107
	US 5420278	A	19950530	US 1994-248124	19940524
	US 5541326	A	19960730	US 1994-339000	19941114
PRAI	GB 1989-9209	A	19890422		
	US 1989-428148	A	19891027		
	GB 1989-24323	A	19891028		
	US 1990-511150	B2	19900419		
	EP 1990-304251	A3	19900420		
	GB 1990-8925	A3	19900420		
	US 1991-748496	B1	19910822		
	US 1991-748497	B1	19910822		
	US 1991-756932	B1	19910909		
	US 1992-911996	A3	19920710		
	US 1992-998887	A3	19921229		
OS	CASREACT 114:164279; MARPAT 114:164279				
GI					



AB The title compds. [I; R1 = alkyl; R2, R3 = alkyl; R2R3 = cycloalkyl, 5-norbornen-2-yl; X = CO2, OCO2, NR7CO, NHNHCO, ONR7CO, CONR7, etc.; R4 = H, alkyl; R5 = R4, hydroxyalkyl, (substituted) Ph, PhCH2; R6 = (substituted) Ph, PhCH2, pyridinyl, pyrimidinyl, pyrazinyl; R7 = H, alkyl (substituted) Ph, PhCH2; n = 1-5], were prepd. Thus, 4-(2-methoxyphenyl)-1-piperazinylbutanamine, Et3N, and Me3CCOCl were stirred overnight in CH2Cl2 to give 38% title compd. II which at 0.1 .mu.M gave 100% displacement of 3H-dipropylaminotetralin from 5-HT1A receptors.

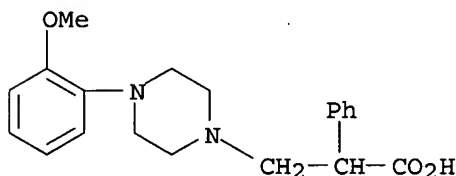
IT 129394-10-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and amidation of, in prepn. of 5-HT1A antagonist)

RN 129394-10-1 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)

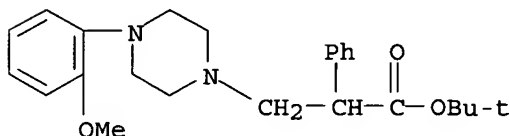


IT 133025-21-5P 133025-22-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as 5-HT1A antagonist)

RN 133025-21-5 CAPLUS

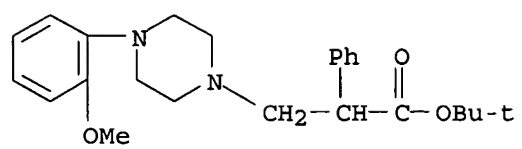
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 133025-22-6 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, 1,1-dimethylethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

10/049795

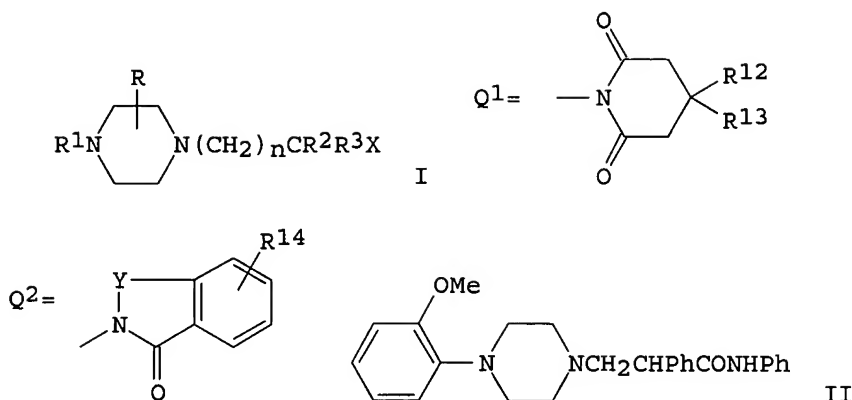


● 2 HCl

10/049795

L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1991:143444 CAPLUS
DN 114:143444
TI Preparation of 1-aryl-4-carboxyalkylpiperazines and related compounds as
serotoninerbic antagonists
IN Cliffe, Ian Anthony
PA Wyeth, John, and Brother Ltd., UK
SO Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 395312	A2	19901031	EP 1990-304250	19900420
	EP 395312	A3	19910508		
	EP 395312	B1	19990512		
	R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE				
	CA 2015034	AA	19901022	CA 1990-2015034	19900420
	AU 9053779	A1	19901025	AU 1990-53779	19900420
	AU 619678	B2	19920130		
	GB 2230781	A1	19901031	GB 1990-8925	19900420
	GB 2230781	B2	19930428		
	HU 54666	A2	19910328	HU 1990-2504	19900420
	DD 296921	A5	19911219	DD 1990-339954	19900420
	ZA 9003019	A	19911224	ZA 1990-3019	19900420
	ZA 9003020	A	19911224	ZA 1990-3020	19900420
	DD 297968	A5	19920130	DD 1990-339955	19900420
	IL 94151	A1	19950831	IL 1990-94151	19900420
	AT 179973	E	19990515	AT 1990-304250	19900420
	ES 2130116	T3	19990701	ES 1990-304250	19900420
	JP 03011059	A2	19910118	JP 1990-106299	19900421
	JP 3036786	B2	20000424		
	US 5364849	A	19941115	US 1992-911996	19920710
	GB 2255976	A1	19921125	GB 1992-15425	19920720
	GB 2255976	B2	19921125		
	US 5382583	A	19950117	US 1992-998887	19921229
	US 5340812	A	19940823	US 1993-1428	19930107
	US 5420278	A	19950530	US 1994-248124	19940524
	US 5541326	A	19960730	US 1994-339000	19941114
PRAI	GB 1989-9209	A	19890422		
	GB 1989-24323	A	19891028		
	US 1990-511150	B2	19900419		
	GB 1990-8925	A3	19900420		
	US 1991-748496	B1	19910822		
	US 1991-748497	B1	19910822		
	US 1991-756932	B1	19910909		
	US 1992-911996	A3	19920710		
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OS	MARPAT 114:143444				
GI					



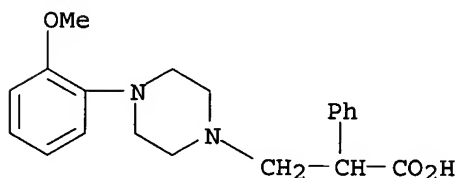
AB The title compds. [I; R = H, alkyl; R1 = aryl, N-contg. heteroaryl; R2 = H, alkyl; R3 = aryl, alkyl, arylalkyl; X = O2CR10, CO2R6, CONR5R9, OCO2R6, NR4COR6, Q1, Q2, etc.; R4 = H, alkyl; R6 = alkyl, cycloalkyl, arylalkyl; R9 = H, alkyl, cycloalkyl, aryl, arylalkyl, 8-azaspiro[4.5]deca-7,9-dione-8-yl-alkyl, etc.; R12, R13 = alkyl; R12R13C = cycloalkyl; R14 = H, halo, alkyl, alkoxy; Y = CO, SO2; n = 1, 2] were prepd. Thus, 1-(2-methoxyphenyl)piperazine was refluxed 18 h with atropic acid in EtOH to give .alpha.-[1-[4-(2-methoxyphenyl)piperazinyl]methyl]benzeneacetic acid. The latter in CH2Cl2 was treated with carbonyldiimidazole and then aniline to give title compd. II. I bound to rot hippocampal 5-HT1A receptors with IC50's of 8-127 nM.

IT 129394-10-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification or amidation of)

RN 129394-10-1 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)

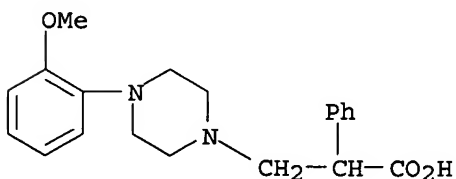


IT 129394-10-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for serotonergic antagonist)

RN 129394-10-1 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)



10/049795

IT 132708-27-1P 132708-44-2P 132708-45-3P

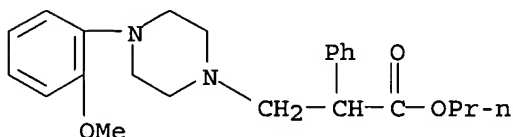
132708-57-7P 132708-68-0P 132708-89-5P

132708-90-8P 132709-05-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as serotonergic antagonist)

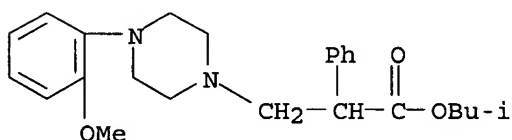
RN 132708-27-1 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, propyl ester (9CI) (CA INDEX NAME)



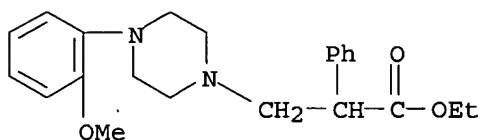
RN 132708-44-2 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, 2-methylpropyl ester (9CI) (CA INDEX NAME)



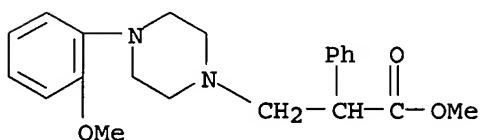
RN 132708-45-3 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 132708-57-7 CAPLUS

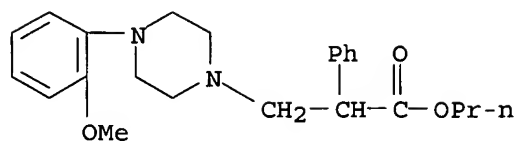
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 132708-68-0 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, propyl ester, dihydrochloride (9CI) (CA INDEX NAME)

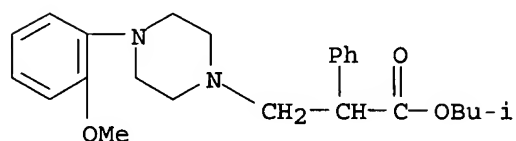
10/049795



● 2 HCl

RN 132708-89-5 CAPLUS

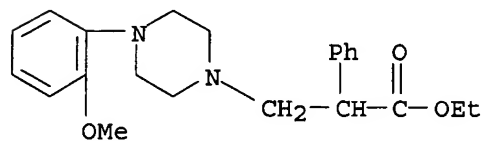
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-,
2-methylpropyl ester, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 132708-90-8 CAPLUS

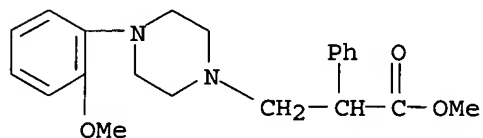
CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, ethyl
ester, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 132709-05-8 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl-, methyl
ester, dihydrochloride (9CI) (CA INDEX NAME)



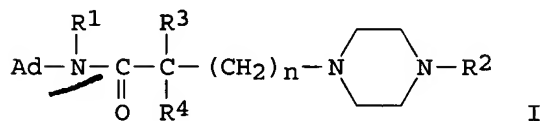
2 HCl

10/049795

10/049795

L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1990:532219 CAPLUS
 DN 113:132219
 TI Preparation of piperazinyllalkylcarboxylic acid adamantylamides as
 anxiolytics, antidepressants, and antipsychotics
 IN Abou-Gharbia, Magid A.; Yardley, John P.; Childers, Wayne E., Jr.; Cliffe,
 Ian A.
 PA American Home Products Corp., USA; Wyeth, John, and Brother Ltd.
 SO U.S., 4 pp. Cont.-in-part of U.S. Ser. No. 297,509, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4921958	A	19900501	US 1989-413407	19890927
	GB 2227018	A1	19900718	GB 1990-349	19900108
	GB 2227018	B2	19920520		
	DD 296921	A5	19911219	DD 1990-339954	19900420
	ZA 9003019	A	19911224	ZA 1990-3019	19900420
	ZA 9003020	A	19911224	ZA 1990-3020	19900420
	DD 297968	A5	19920130	DD 1990-339955	19900420
	US 5364849	A	19941115	US 1992-911996	19920710
	GB 2255976	A1	19921125	GB 1992-15425	19920720
	GB 2255976	B2	19921125		
	US 5382583	A	19950117	US 1992-998887	19921229
	US 5340812	A	19940823	US 1993-1428	19930107
	US 5420278	A	19950530	US 1994-248124	19940524
	US 5541326	A	19960730	US 1994-339000	19941114
PRAI	US 1989-297509	B2	19890113		
	GB 1989-9209	A	19890422		
	GB 1989-24323	A	19891028		
	US 1990-511150	B2	19900419		
	GB 1990-8925	A3	19900420		
	US 1991-748496	B1	19910822		
	US 1991-748497	B1	19910822		
	US 1991-756932	B1	19910909		
	US 1992-911996	A3	19920710		
	US 1992-998887	A3	19921229		
OS	MARPAT 113:132219				
GI					



AB Title amides I [Ad = 1- or 2-adamantyl, 3-noradamantyl; n = 1-5; R1 = H, alkyl, (substituted) Ph, CH2Ph; R2 = pyridinyl, pyrimidinyl, pyrazinyl, (substituted) Ph, CH2Ph; R3, R4 = H, Me, Ph, CH2Ph] were prepd. Thus, alkylation of 1-(2-methoxyphenyl)piperazine by 3-bromo-N-(1-adamantyl)propanamide in CH2Cl2 contg. EtN(Me2CH)2, followed by workup, chromatog., and acidification gave I (Ad = 1-adamantyl, n = 1, R1 = R3 = R4 = H, R2 = 2-MeOC6H4) (II) as its di-HCl salt in 20% yield. II showed a 5-HT1A receptor affinity comparable to buspirone, and D2 dopaminergic

10/049795

affinity sufficient for antipsychotic utility. Two addnl. I were prepd., showing 5-HT_{1A} activity but without significant D₂ activity.

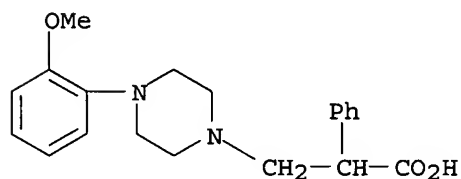
IT **129394-10-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, in prepn. of anxiolytics)

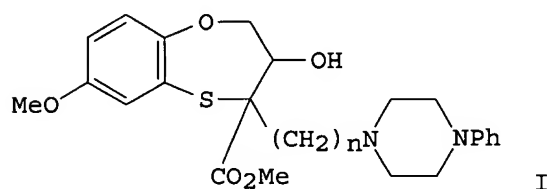
RN 129394-10-1 CAPLUS

CN 1-Piperazinepropanoic acid, 4-(2-methoxyphenyl)-.alpha.-phenyl- (9CI) (CA INDEX NAME)



10/049795

L4 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1988:112411 CAPLUS
DN 108:112411
TI 1,5-Benzoxathiepin derivatives. II. Synthesis and serotonin
S2-receptor-blocking activity of aminoalkyl-substituted
3,4-dihydro-2H-1,5-benzoxathiepin-3-ols and related compounds
AU Sugihara, Hirosada; Mabuchi, Hiroshi; Hirata, Minoru; Imamoto, Tetsuji;
Kawamatsu, Yutaka
CS Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, 532, Japan
SO Chemical & Pharmaceutical Bulletin (1987), 35(5), 1930-52
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
OS CASREACT 108:112411
GI



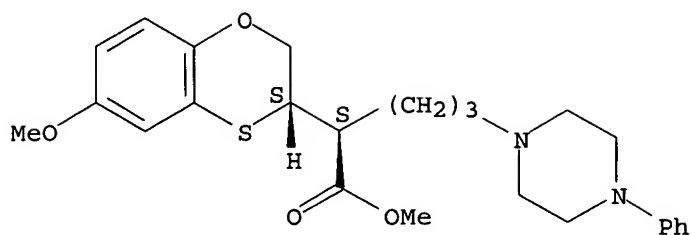
AB Novel 1,5-benzoxathiepin derivs., e.g., I ($n = 3, 4, 5$), with an aminoalkyl group at the 2-, 3-, 4-position, were synthesized and evaluated for serotonin S2-receptor-blocking activity and adrenergic .alpha.1-receptor-blocking activity. Me 4-aminoalkyl-3-hydroxy-3,4-dihydro-2H-1,5-benzoxathiepin-4-carboxylates showed significant S2-receptor-blocking activities. Structure-activity relationships, including the results of a conformational study and skeletal modifications, were examd. In the series of 1,5-benzoxathiepin, 1-benzoxepin and 1-benzothiepin derivs., Me cis-3-hydroxy-7-methoxy-4-[3-(4-phenyl-1-piperazinyl)propyl]-3,4-dihydro-2H-1,5-benzoxathiepin-4-carboxylate hydrochloride (CV-5197) showed the most potent and the most selective S2-receptor-blocking activity in the binding profile, and was chosen as a candidate for further pharmacol. evaluation.

IT 113272-89-2P 113272-90-5P 113272-91-6P
113272-92-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 113272-89-2 CAPLUS
CN 1-Piperazinepentanoic acid, .alpha.-(2,3-dihydro-6-methoxy-1,4-benzoxathiin-3-yl)-4-phenyl-, methyl ester, (R*,R*)- (9CI) (CA INDEX NAME)

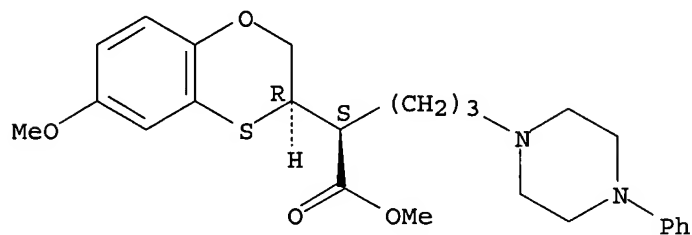
Relative stereochemistry.

10/049795



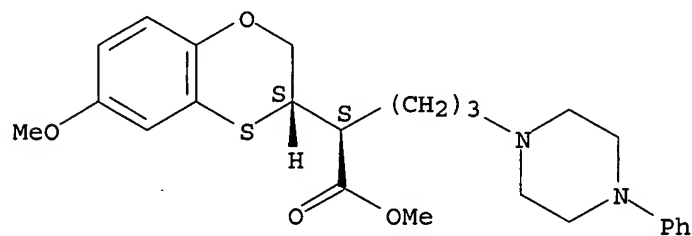
RN 113272-90-5 CAPLUS
CN 1-Piperazinepentanoic acid, .alpha.-(2,3-dihydro-6-methoxy-1,4-benzoxathiin-3-yl)-4-phenyl-, methyl ester, (R*,S*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 113272-91-6 CAPLUS
CN 1-Piperazinepentanoic acid, .alpha.-(2,3-dihydro-6-methoxy-1,4-benzoxathiin-3-yl)-4-phenyl-, methyl ester, monohydrochloride, (R*,R*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

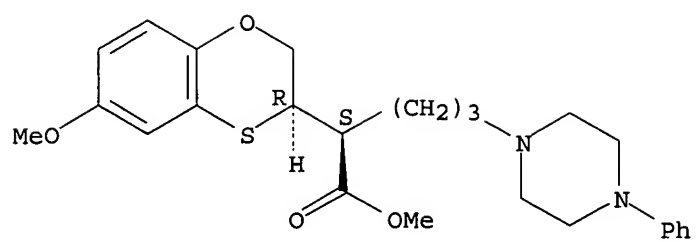


● HCl

RN 113272-92-7 CAPLUS
CN 1-Piperazinepentanoic acid, .alpha.-(2,3-dihydro-6-methoxy-1,4-benzoxathiin-3-yl)-4-phenyl-, methyl ester, monohydrochloride, (R*,S*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

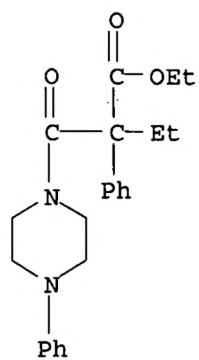
10/049795



● HCl

L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1968:506663 CAPLUS
 DN 69:106663
 TI Analogs and derivatives of .alpha.-phenyl-.alpha.-ethylmalonic acid
 N-(2-diethylaminoethyl)amide
 AU Buttini, A.; Melandri, M. M.; Galimberti, P.
 CS Schelabor S.p.A., Milan, Italy
 SO Bollettino Chimico Farmaceutico (1968), 107(6), 362-9
 CODEN: BCFAAI; ISSN: 0006-6648
 DT Journal
 LA Italian
 AB A number of compds. related to Fenalamide $\text{RCOCPhEtCO}_2\text{Et}$ (I) ($\text{R} = \text{NHCH}_2\text{CH}_2\text{NMe}_2$) were synthesized and their pharmacol. activities tested. Thus, to a mixt. of 0.1 mole $\text{PhEtC(CO}_2\text{Et)COCl}$ and 0.1 mole Na_2CO_3 in 150 ml. C_6H_6 , 0.1 mole of the appropriate amine added with cooling, and the whole refluxed 4 hrs., gave the following I (R , b.p./mm., and m.p. HCl salt given): 4-methylpiperazino, 152-3.degree./0.2, 171-2.degree.; 4-phenylpiperazino 205-6.degree./0.3, 181-3.degree.; 4-benzylpiperazino, 206-8.degree./0.3, 192-4.degree.; 4-(2-hydroxyethyl)piperazino, 198-9.degree./0.3, 153-4.degree.; $\text{O(CH}_2)_2\text{O(CH}_2)_2\text{NMe}_2$ (II), 183-4.degree./0.8, -; and $\text{O(CH}_2)_2\text{NMePh}$, 204-6.degree./0.8, -. To a soln. of 0.1 mole MeONa in 200 ml. MeOH , 0.1 mole $\text{EtPhC(CO}_2\text{Et)}_2$ and 0.5 mole of the appropriate amine added and the mixt. refluxed 8 hrs. gave the following $\text{EtCR}_1(\text{CONHR})_2$ (III) ($\text{R}_1 = \text{Ph}$) (IV) (R and b.p./mm. or m.p. given): $(\text{CH}_2)_2\text{NMe}_2$ (IVa), 180-5.degree./0.5; $(\text{CH}_2)_2\text{NMe}_2$, 180-5.degree./0.7; $(\text{CH}_2)_3\text{NMe}_2$, 170-3.degree./0.3; $(\text{CH}_2)_3\text{NMe}_2$, 180-5.degree./1; $(\text{CH}_2)_2\text{OH}$, 126-7.degree.; $(\text{CH}_2)_3\text{OH}$, 94-5.degree.; and $(\text{CH}_2)_2\text{NMe}$, 200-4.degree./0.4. Similarly prepd. from $\text{ZCH}_2\text{Cet(CO}_2\text{Et)}_2$ ($\text{Z} = \text{piperidino}$) were the following III ($\text{R}_1 = \text{piperidinomethyl}$) (R and b.p./mm. given): $(\text{CH}_2)_2\text{NMe}_2$, 180-90.degree./0.8; $(\text{CH}_2)_3\text{NMe}_2$, 185-95.degree./0.6; $(\text{CH}_2)_2\text{NMe}_2$, 177-80.degree./0.3; $(\text{CH}_2)_3\text{NMe}_2$, 200-10.degree./0.7; $(\text{CH}_2)_2\text{OH}$, 160-8.degree./0.8; $(\text{CH}_2)_3\text{OH}$, 200-10.degree./0.6; and $(\text{CH}_2)_2\text{NMe}$, 200-5.degree./0.5. Finally, a soln. of 0.1 mole $\text{EtCH(CO}_2\text{Et)}_2$, 0.11 mole paraformaldehyde, 0.1 mole pyrrolidine, and 500 ml. EtOH refluxed 6 hrs. gave $\text{QCH}_2\text{Cet(CO}_2\text{Et)}_2$ ($\text{Q} = \text{pyrrolidino}$), b1 115-20.degree., which allowed to react with an appropriate amine as reported for IV, gave the following III ($\text{R}_1 = \text{pyrrolidinomethyl}$) (R and b.p./mm. given): $(\text{CH}_2)_2\text{NMe}_2$, 204-10.degree./0.9; and $(\text{CH}_2)_3\text{NMe}_2$, 200-10.degree./0.8. II exhibited a high anticholinergic activity in vitro; IVa exhibited at 50 mg./kg. i.p. or at 180 mg./kg. per os a remarkable antitussive activity in rats.
 IT 20389-21-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 20389-21-3 CAPLUS
 CN 1-Piperazinepropionic acid, .alpha.-ethyl-.beta.-oxo-.alpha.,4-diphenyl-, ethyl ester (8CI) (CA INDEX NAME)

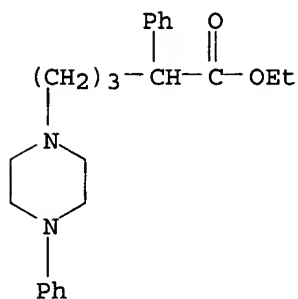
10/049795



10/049795

L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1965:91011 CAPLUS
DN 62:91011
OREF 62:16272b-d
TI 1-(4-Aryl-5-hydroxypentyl)-4-arylpiperazines
PA UCB (Union Chimique-Chemische Bedrijven), Societe Anon.
SO 7 pp.
DT Patent
LA Unavailable
FAN.CNT 1

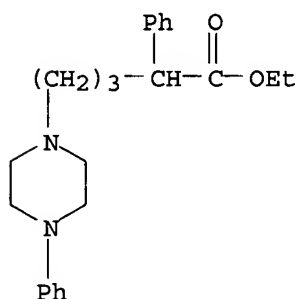
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 642084		19640703	BE	
PRAI	GB		19630114		
GI	For diagram(s), see printed CA Issue.				
AB	Compds. of the general formula I are prepd. and can be used in the treatment of neurotic disorders. Thus, a mixt. of 10 ml. H ₂ O, 80 ml. H ₂ SO ₄ (d. 1.83), and 39.2 g. 1-(4-phenyl-4-cyanobutyl)-4-phenylpiperazine-2HCl is heated 3 hrs. at 120.degree., 1 kg. EtOH is added dropwise as the H ₂ O is distd., and the mixt. is cooled and made alk. with NaOH. The mixt. is extd. with 250 ml. C ₆ H ₆ , the ext. is concd., and the residue is treated with HCl(EtOH) to give 1-(4-phenyl-4-carbethoxybutyl)-4-phenylpiperazine-2HCl (II), m. 197-9.degree.. II in H ₂ O is treated with 50 ml. 40% NaOH, the mixt. is extd. with C ₆ H ₆ , the ext. is evapd. to dryness, the residue is dissolved in 100 ml. ether, and a mixt. of the soln. and 1.5 g. LiAlH ₄ in 125 ml. ether is refluxed 6 hrs. to give 13.5 g. 1-(4-phenyl-5-hydroxypentyl)-4-piperazine, m. 85-6.degree. (ether). Also prepd. are the following I (R, X, and m.p. 2HCl salt given): Me, MeO, 186-7.degree. (Me ₂ CO); H, MeO, 180.degree. (alc.-ether). Also prepd. are p-MeC ₆ H ₄ CH(CO ₂ H)(CH ₂) ₃ Cl (m. 75-6.degree.) and p-MeC ₆ H ₄ CH(CH ₂ OH)(CH ₂) ₃ Cl.				
IT	2870-53-3, 1-Piperazinevaleric acid, .alpha.,4-diphenyl-, ethyl ester, dihydrochloride (prepn. of)				
RN	2870-53-3 CAPLUS				
CN	Valeric acid, 2-phenyl-5-(4-phenyl-1-piperazinyl)-, ethyl ester, dihydrochloride (8CI) (CA INDEX NAME)				



●2 HCl

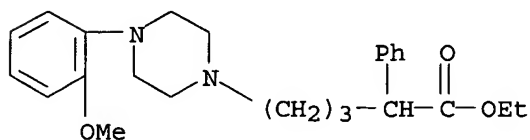
10/049795

L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1963:448345 CAPLUS
DN 59:48345
OREF 59:8732a-c
TI New derivatives of N, N'-disubstituted piperazine having neurotropic properties
AU Morren, H.; Zivkovic, D.; Linz, R.; Strubbe, H.; Marchal, L.
CS Union Chim.-Chem. Bedrijven, Brussels
SO Industrie Chimique Belge (1963), 28, 123-34
CODEN: ICBEAJ; ISSN: 0019-9052
DT Journal
LA Unavailable
GI For diagram(s), see printed CA Issue.
AB Hydrochlorides of I were prep'd. by classical methods. R was H, lower alkyl, OMe, halogen in o, m, or p; R1 was H, Me, OMe, Cl, CF3 in o, m, or p; R2 was H, CN, CONH2, CONMe2, CO2Et, COMe, COEt, COPr, CH2NH2, CH2OH; and Z was (CH2)2-4, CH2CHMeCH2, CHMeCH2. The max. neurotropic activity was found for I [R2 = CN, Z = (CH2)3] where R = halogen, Me, or MeO in para position and R1 = halogen, Me, or MeO in ortho position.
IT 2870-53-3, 1-Piperazinevaleric acid, .alpha.,4-diphenyl-, ethyl ester, dihydrochloride 96457-75-9, 1-Piperazinevaleric acid, 4-(o-methoxyphenyl)-.alpha.-phenyl-, ethyl ester, dihydrochloride (prepn. of)
RN 2870-53-3 CAPLUS
CN Valeric acid, 2-phenyl-5-(4-phenyl-1-piperazinyl)-, ethyl ester, dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

RN 96457-75-9 CAPLUS
CN 1-Piperazinevaleric acid, 4-(o-methoxyphenyl)-.alpha.-phenyl-, ethyl ester, dihydrochloride (7CI) (CA INDEX NAME)



2 HCl

10/049795

10/049795

=> file caold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

103.60

263.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-13.67

-13.67

FILE 'CAOLD' ENTERED AT 17:10:20 ON 29 SEP 2003

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s l3

L5 2 L3

=> d l5 1-2 bib hitstr

10/049795

L5 ANSWER 1 OF 2 CAOLD COPYRIGHT 2003 ACS on STN

AN CA62:16272b CAOLD

TI 1-(4-aryl-5-hydroxypentyl)-4-arylpiperazines

PA UCB (Union Chimique-Chemische Bedrijven), S.A.

DT Patent

PATENT NO.	KIND	DATE
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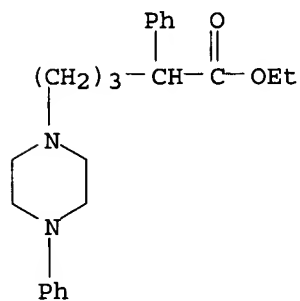
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PI BE 642084

IT 2870-53-3

RN 2870-53-3 CAOLD

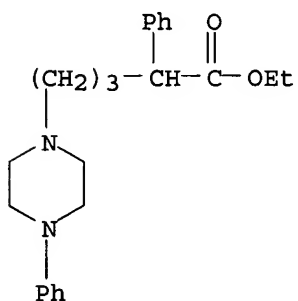
CN Valeric acid, 2-phenyl-5-(4-phenyl-1-piperazinyl)-, ethyl ester,
dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

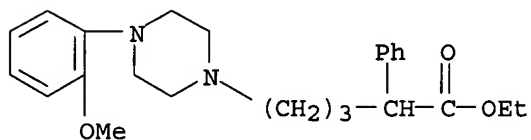
10/049795

L5 ANSWER 2 OF 2 CAOLD COPYRIGHT 2003 ACS on STN
AN CA59:8732a CAOLD
TI derivs. of N,N'-disubstituted piperazine having neurotropic properties
AU Morren, Henri; Zivkovic, D.; Linz, R.; Strubbe, H.; Marchal, L.
IT 2870-53-3 96457-75-9
RN 2870-53-3 CAOLD
CN Valeric acid, 2-phenyl-5-(4-phenyl-1-piperazinyl)-, ethyl ester,
dihydrochloride (8CI) (CA INDEX NAME)



●2 HCl

RN 96457-75-9 CAOLD
CN 1-Piperazinevaleric acid, 4-(o-methoxyphenyl)-.alpha.-phenyl-, ethyl
ester, dihydrochloride (7CI) (CA INDEX NAME)



●2 HCl

10/049795

=> log h

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ENTRY	SESSION
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FULL ESTIMATED COST

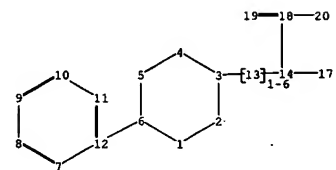
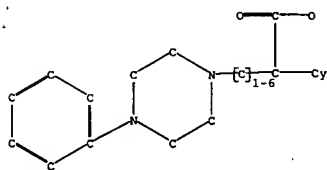
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SINCE FILE	TOTAL
ENTRY	SESSION
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CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 17:10:49 ON 29 SEP 2003



chain nodes :

13 14 17 18 19 20

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

3-13 6-12 13-14 14-17 14-18 18-19 18-20

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

1-2 1-6 2-3 3-4 3-13 4-5 5-6 6-12 14-17 18-19 18-20

exact bonds :

13-14 14-18

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
12:Atom 13:CLASS 14:CLASS 17:Atom 18:CLASS 19:CLASS 20:CLASS